

Fish 1881

No. III.

Census of 1880. -

Statistics of Fisheries, Marine

Part of. -Name of vesselRig.TonnageWhere built.When built.Original cost.Present value

; of tide.

No of crew.Nationality. American Nova Scotian Swedish etc. Irish French English ^{fathian} Portuguese Negro What fishery engaged inWhere fishing.Deposition made of fishGross stock 18 Profits 18

Average share of crew.

No bbls mackerel, 18 (total)No lbs other fish 18 - (total) ^{No. within 3 miles land}Name of ~~the fish~~ ^{master} ^(No within 3 miles land)

Name of Agent or owner.

Name of person giving information.

Name of recorder.

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide.

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1030

R.-Dredge.

✓ *Synaphobranchius*

1

✓ *Scopelus*

2 + 3

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1030

Date, Sept. 14, 1881.

Locality.

Bearings, N. Lat. $39^{\circ} 58' 30''$

W. Lon. $69^{\circ} 15'$

Time of day, 1.52 P.M. ; of tide,

State of sky, b. c. c.

Temperature of air, 65

" surface of water, 66

" at depth of 5 fathoms, 66

" of bottom, 41

Depth, in fathoms, 33~

Nature of bottom, yellow mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1031 Trawl tore.

Scopelus (? two species)	14
Cottunculus microps	3
Raia very young	1
Sebastes marinus	1
Phycis tenuis	1
" Chesten	20
Macurus Bairdii	7
Raia egg large (not kept)	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1031

Date, Sept. 14, 1881.

Locality,

Bearings, N. Lat. $39^{\circ} 57'$
N. Lon. $69^{\circ} 19'$

Time of day, 2.54 P.M.; of tide,

State of sky, foggy

Temperature of air, 64

" surface of water. 65-

" at depth of 5 fathoms, 63.5-

" of bottom, 255-

Depth, in fathoms, 255

Nature of bottom, yellow mud

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1032 Small beam trawl

✓	Macrurus	Bairdii	many
✓	"	carminatus	8
✓	Aetarches	parmatas	5
✓	Phycis	Chestei	2 pale all
✓	Merluccius		17
✓	Lycodes	verillii ♀	1
	Rain	egg small	7
✓	Phycis	Chuss	13
✓	Scopelus		2
✓	Paralichthys	oblongus	1

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1032

Date, Sept 14 1887

Locality, N. lat. $39^{\circ} 56'$

Bearings, W. long. $69^{\circ} 22'$

Time of day, 4 P.M. ; of tide,

State of sky, Cloudy

Temperature of air, 65

" surface of water, 65

" at depth of 5 fathoms, 65.5

" of bottom, 46

Depth, in fathoms, 208

Nature of bottom, Yellow mud.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1033

✓ Scophium	not kept	2
✓ Dogfish	1 specimen	1
✓ Paralichthys	oblongus	4
✓ Merluccius		16
Macrurus	Pontinus	
✓ Macrurus	carminatus	31
✓ Phycis	Cheston	3 + 51
✓	C. m.	14
✓ Glyptocephalus		1
Raja	juv.	1
✓ Anoplopoma	1 <u>lost</u>	
✓ Setarches	parmatius	4

TEMPERATURE RECORD.

Instrument used, *Beam Trawl*

Current number of observation, *1033*

Date, *Sept 14 1887*

Locality,

Bearings, *N. lat. 39° 56'*
W. lon. 69° 24'

Time of day, *4.55 P.M.*; of tide,

State of sky, *b. c.*

Temperature of air, *66*

" surface of water, *63*

" at depth of *5* fathoms, *63*

" of bottom,

Depth, in fathoms, *183*

Nature of bottom, *s. g.*

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1034 Fawl fowin

Leopelur

1 + 2

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1034

Date, Sept. 14, 1881.

Locality, N. Lat. $39^{\circ} 56'$

Bearings, W. Long. $69^{\circ} 26'$

Time of day, 5.55 P.M.; of tide,

State of sky, b. c.

Temperature of air, 66,

" surface of water. 62

" at depth of 5 fathoms, 60

" of bottom, 46.5

Depth, in fathoms, 140

Nature of bottom, sand + yellow s.

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1035

Lophius	ad.	1
Opichthys		1
Citharichthys	arc.	2
Merluccius		4
Phycis	chuss	27

TEMPERATURE RECORD.

Instrument used, *Beane Therm.*

Current number of observation, *1038-*

Date, *Sept. 14, 1881.*

Locality,

Bearings, *Ni. lat. 30° 54'*
W. lon. 69° 28'

Time of day, *6.56 P.M.*; of tide,

State of sky, *b. c.*

Temperature of air, *65*

" surface of water, *62*

" at depth of *5* fathoms, *60*

" of bottom, *47*

Depth, in fathoms, *120*

Nature of bottom, *sand*

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Hani 1036 R. S. L. G.

Ophidione	juv.	1
Ophichthys ?	fragment	1

TEMPERATURE RECORD.

Instrument used, *Rake Dredge.*
Current number of observation, *1036*
Date, *Sept. 14, 1881.*
Locality,
Bearings, *N. Lat. 39° 58'*
W. Long. 60° 20'
Time of day, *7.54 P.M.*; of tide,
State of sky, *b.c.*
Temperature of air, *62*
" surface of water, *61.5*
" at depth of fathoms,
" of bottom, *61*
Depth, in fathoms, *94*
Nature of bottom, *Sand*
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Haul 1037

~~1037~~

~~Citharus~~

~~+~~

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation,

Date, *Sept. 15, 1881.*

Locality, *Off Roman's Land*

Bearings, *Gay Head N. by E. $5\frac{1}{4}$ E.*

Time of day, *8 A.M.* ; of tide,

State of sky,

Temperature of air,

" surface of water.

" at depth of fathoms,

" of bottom,

Depth, in fathoms, *3*

Nature of bottom, *Sand (supposed wreck)*

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1038

✓ <i>Myxine glutinosa</i>	3
✓ <i>Setarches parvatus</i>	5+4+23+3
✓ <i>Citharichthys arctif.</i>	juv 1+30
✓ <i>Raia laevis</i> ? — juv.	— 3
✓ <i>Monoleone seselicauda</i>	1
✓ <i>Glyptocephalus cynoglossus</i>	1
✓ <i>Paralichthys oblongus</i>	3
✓ <i>Merluccius bilinearis</i>	14
✓ <i>Phycis chuss</i>	1
✓ <i>Scopelus</i> 2 species	3
✓ <i>Raia eglantina</i> ? juv.	4
✓ <i>Hippoglossoides</i> "	3
✓ <i>Calinectes</i> ? juv. at surface.	1
✓ <i>Hyphalonedrus chalybeius</i>	6+!
✓ <i>Macrurus carinatus</i>	1

Trawl-line :

✓ <i>Squalus acanthias</i>	3	1
✓ <i>Phycis tenuis</i>		1
✓ <i>Merluccius</i>		2

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1038*
Date, *Sept. 21, 1881.*
Locality, *Off Martha's Vineyard.*
Bearings, *N. lat. 39° 58'*
W. lon. 70° 06'
Time of day, *5.50 a.m.*; of tide,
State of sky, *Hazy*
Temperature of air, *67*
" surface of water, *67*
" at depth of *5* fathoms, *67*
" of bottom, *47*
Depth, in fathoms, *146*
Nature of bottom, *S. + sh.*
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Haul 1039 fouled

Citharichthys arcifrons 1

Monacanthus at surface 6

TEMPERATURE RECORD.

Instrument used,

Current number of observation, 1039

Date, Sept. 21, 1881.

Locality, Off Martha's Vineyard

Bearings, N. lat. $39^{\circ} 59'$
W. lon. $70^{\circ} 06'$

Time of day, 9.55 A.M.; of tide,

State of sky, Hazy

Temperature of air, 66.30

" surface of water, 67

" at depth of 5 fathoms, 68

" of bottom, S. C.

Depth, in fathoms, 130 - 136

Nature of bottom, S. + sh.

Direction of surface current.

Force of surface current.

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1040 Ex-Dredge.

Glyptocephalus cynoglossus 2

TEMPERATURE RECORD.

Instrument used, *Excelsior Dredge* ..
Current number of observation, *1040*
Date, *Sept. 21, 1887.*
Locality, *Off Martha's Vineyard*
Bearings, *N. lat. 40° 00'*
N. lon. 70° 06'
Time of day, *10.43 a.m.*; of tide,
State of sky, *hazy*
Temperature of air, *64*
“ surface of water, *68*
“ at depth of fathoms,
“ of bottom, *66*
Depth, in fathoms, *93*
Nature of bottom, *S. & sh.*
Direction of surface current,
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

Haul 1041

<i>Tautoglabrus</i>	2
<i>Centropomus atrinoides</i> juv.	3
<i>Stenotomus argenteus</i> "	12
<i>Prionotus carolinus</i> "	2
<i>Raja erinacea</i> egg	1

TEMPERATURE RECORD.

Instrument used.

Current number of observation, 1041

Date, Sept. 22, 1881,

Locality, Vineyard Sound

Bearings, West Chop Light
E $\frac{1}{2}$ N, 1 $\frac{3}{4}$ miles

Time of day, 12.33 P.M.; of tide,

State of sky, b. c.

Temperature of air, 63.3

" surface of water, 65

" at depth of 5 fathoms, 65

" of bottom, 65

Depth, in fathoms, 9

Nature of bottom, gr.

Direction of ~~surface current~~ ^{wind} S S W

Force of ~~surface current~~ ^{wind} 4

Direction of ~~bottom current~~ ^{drift} N. S. W. $\frac{3}{4}$ m.

Force of bottom current,

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Haul 1042

<i>Raja erinacea</i>		2
<i>Stenotomus argyrops</i>	juv.	
<i>Centropristis atraninus</i>	"	
<i>Prionotus carolinus</i>	"	
<i>Tautoglabrus adspersus</i>	"	

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date, *Sept. 22, 1881.*

Locality, ~~Off~~ *Vineyard Sound*

Bearings, *West Chop Light*
E. $\frac{1}{2}$ N. 1 $\frac{1}{2}$ miles

Time of day, *1.17 P.M.* ; of tide,

State of sky, *b. c.*

Temperature of air, *63.3*

" surface of water, *65*

" at depth of fathoms,

" of bottom, *65*

Depth, in fathoms, *6*

Nature of bottom, *s. gravel*

Direction of ~~surface current~~ *wind* *S S W*

Force of ~~surface current~~ *wind* *5*

Direction of ~~bottom current~~ *drift* *N. by N., $\frac{1}{2}$ m.*

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

- ✓ *Botulid*
- ✓ *Enchelyopus cimbrius*
- ✓ *Scyllium*
- ✓ *Phycis chuss*
- ✓ *Hyphalonedrus chalybeius*
- ✓ *Peristedium miniatum*
- ✓ *Merluccius bilinearis*
- ✓ *Scorpaena*

TEMPERATURE RECORD.

Instrument used, *Trawl.*

Current number of observation, *1043.*

Date, *Oct. 10, 1881.*

Locality, *Off Capes of Delaware.*

Bearings, *Lat. 38° 39' N.*

Long. 73° 11' W.

Time of day, *7.17 a.m.*; of tide,

State of sky, *partly cloudy.*

Temperature of air, *63.5*

" surface of water, *65.5*

" at depth of *5* fathoms, *65.5*

" of bottom, *49*

Depth, in fathoms, *130*

Nature of bottom, *sand*

Direction of ~~surface current~~, *wind N N E.*

Force of ~~surface current~~, " *4*

Direction of ~~bottom current~~, *drift N W. by N., 1 3/4 m.*

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

✓ *Maurolicus*

(Surface)

✓ *Scopelus*

TEMPERATURE RECORD.

Instrument used, *Trawl.*

Current number of observation, *1044*

Date, *Oct. 10, 1881.*

Locality, *Off Capes of Delaware.*

Bearings, *Lat. 38° 37' N.*

Long. 73° 12' W.

Time of day, *8.15 A.M.*; of tide,

State of sky, *Cir. Cum.*

Temperature of air, *65*

" surface of water, *66*

" at depth of *5* fathoms, *66*

" of bottom, *42.5*

Depth, in fathoms, *224*

Nature of bottom, *Gray mud.*

Direction of ~~surface current~~, *wind*, *NN.*

Force of ~~surface current~~, " *3*

Direction of ~~bottom current~~, *drift*, *NNN. 1/2 N.*

Force of bottom current,

Name of vessel,

To what service attached.

Name and rank of commanding officer,

Name and position of observer,

*Came up empty. Deepened to
300 fms.*

REMARKS.

- ✓ *Phycis tenuis* *Lacmonema*
- ✓ *Phycis Chesteri*
- ✓ *Macrurus carminatus*
- ✓ " *Bairdii*
- ✓ *Scorpaena*
- ✓ *Halientæa senticosa*
- ✓ *Hoplostethus*
- Phycis* *very young*
- ✓ *Glyptocephalus cynoglossus*

TEMPERATURE RECORD.

Instrument used, *Trawl.*

Current number of observation, *1045.*

Date, *Oct. 10, 1881.*

Locality, *Off Capes of Delaware.*

Bearings, *Lat. 38° 35' N.*

Lon. 73° 13' W.

Time of day, *9.32 A.M.*; of tide,

State of sky, *partly cloudy.*

Temperature of air, *67*

" surface of water, *66*

" at depth of *5* fathoms, *66*

" of bottom, *40*

Depth, in fathoms, *312*

Nature of bottom, *gray mud.*

Direction of ~~surface current~~ *wind, N N W.*

Force of ~~surface current~~ " *3*

Direction of ~~bottom current~~ *drift, W 3/4 N, 3/4 m.*

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

- ✓ *Peristedium miniatum*
Phycis very young
- ✓ *Macrurus carminatus*

TEMPERATURE RECORD.

Instrument used, *Trawl,*
 Current number of observation, *1046.*
 Date, *Oct. 10, 1881.*
 Locality, *Lat. 38° 33' N Off Cape of Del.*
 Bearings, *Lat. 38° 33' N.*
 Lon. 73° 18' W.
 Time of day, *11.14 A.M.;* of tide,
 State of sky, *Clear.*
 Temperature of air, *66*
 " surface of water, *66*
 " at depth of *5* fathoms, *65*
 " of bottom, *57.*
 Depth, in fathoms, *104*
 Nature of bottom, *sand*
 Direction of ~~surface current~~, *wind; N.*
 Force of ~~surface current~~, " , *H*
 Direction of ~~bottom current~~, *drift, N N N, 3/4 m.*
 Force of bottom current.
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

- ✓ *Peristedium miniatum*
- ✓ *Myxine glutinosa*
- ✓ *Scorpaëna*
- ✓ *Merluccius bilinearis*
- ✓ *Hyphalonedrus chalybeius*
- ✓ *Raia* young
- ✓ *Citharichthys arcifrons*
- ✓ *Macrurus carminatus*
- ✓ *Glyptocephalus cynoglossus*

dying specimen of Dolium.

TEMPERATURE RECORD.

Instrument used, *Trawl*,
Current number of observation, *1047*.
Date, *Oct. 10, 1881*.
Locality, *Off Capes of Delaware*.
Bearings, *Lat. 38° 31' N.*
Lon. 73° 21' W.
Time of day, *12.15 P.M.*; of tide,
State of sky, *Clear*
Temperature of air, *69*
" surface of water, *66*
" at depth of *5* fathoms, *65*
" of bottom, *49*
Depth, in fathoms, *156*
Nature of bottom, *Sand*
Direction of ~~surface current~~, *wind, N.*
Force of ~~surface current~~, " , *4*.
Direction of ~~bottom current~~, *drift, N.W., 1 1/2 m.*
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

- ✓ *Nemichthys scolopaceus*
- ✓ *Stomias' ferox*
- ✓ *Chauliodus Sloanii*
- ✓ *Gonostoma demudata*

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1048*
Date, *Oct. 10, 1881.*
Locality, *Off Capes of Delaware.*
Bearings, *Lat. 38° 29' N.*
Lon. 73° 21' W.
Time of day, *1.55 P.M.* of tide,
State of sky, *Clear.*
Temperature of air, *71.*
“ surface of water, *66*
“ at depth of *5* fathoms, *65*
“ of bottom, *40*
Depth, in fathoms, *435*
Nature of bottom, *Mud*
Direction of ~~surface current~~ *wind, N.*
Force of ~~surface current~~ “ , *4*
Direction of ~~bottom current~~ *drift, N, 2 m.*
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

- ✓ *Simenichelys parasiticus*
- ✓ *Halicutæa senticosa*
- ✓ *Synaphobranchus pinnatus*
- ✓ *Nemichthys scolopaceus*
- ✓ *Lycodes Verrillii*
- ✓ *Cottunculus torvus*
- Lycodes* young
- ✓ *Cottunculus microps*
- ✓ *Macurus Bairdii*
- ✓ *Phycis Chesteri*
- ✓ *Merluccius bilinearis*
- ✓ *Lophius piscatorius*
- ✓ *Glyptocephalus cynoglossus*

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1049*
Date, *Oct. 10, 1881.*
Locality, *Off Capes of Delaware.*
Bearings, *Lat. 38° 28' N.*
Lon. 73° 22' W.
Time of day, *3.30 P.M.*; of tide,
State of sky, *Clear*
Temperature of air, *68*
“ surface of water, *66*
“ at depth of *5* fathoms, *66*
“ of bottom, *40*
Depth, in fathoms, *435*
Nature of bottom, *Mud*
Direction of ~~surface current~~, *wind, N.*
Force of ~~surface current~~, “ , *H.*
Direction of ~~bottom current~~, *drift, NW, 2 m.*
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom.

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide.

State of sky,

Temperature of air,

“ surface of water.

“ at depth of fathoms.

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation.

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom, .

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day, ; of tide,

State of sky,

Temperature of air,

“ surface of water,

“ at depth of fathoms,

“ of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

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Instrument used,

Current number of observation,

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Time of day, ; of tide,

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REMARKS.

✉ Congress, at its last session, having passed an act (taking effect May 1, 1879,) "Official Postage Stamps," the Envelopes contained in this shipment are prepared after that date. Should it become necessary to use them BEFORE THAT TIME MUST be affixed.

271 Apr

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